US ERA ARCHIVE DOCUMENT

August 2017

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FACT SHEET

Permittee Name: Speedy's Convenience, Inc.

Mailing Address: 35960 Grant Road

Lupton, Arizona 86508

Facility Location: Speedy's Truck Stop

Exit 359, Grant Road @ I-40 Lupton, Apache County, Arizona

Contact Person(s): Mr. Mark Nicholson, Owner

(928) 688-2775

Elizabeth McNally P.E., Principal Animas Environmental Services, LLC

(505) 564-2281

NPDES Permit No.: NN0031001

I. STATUS OF PERMIT

Speedy's Convenience, Inc. ("SCI" or "permittee") has applied for a National Pollutant Discharge Elimination System (NPDES) permit to authorize the discharge of treated groundwater to receiving surface water in an unnamed wash which eventually drains to the Puerco River near Lupton in Apache County, Arizona. An application was submitted dated March 7, 2017. EPA Region IX has developed this permit and fact sheet pursuant to Section 402 of the Clean Water Act, which requires point source dischargers to control the amount of pollutants that are discharged to waters of the United States through obtaining a NPDES permit.

This permittee has been classified as a minor discharger.

II. SIGNIFICANT CHANGES TO PREVIOUS PERMIT

This is a new permit.

III. GENERAL DESCRIPTION OF FACILITY

SCI owns and operates a Truck Stop located off Exit 359 on I-40 near Lupton in Apache County Arizona. SCI has hired Animas Environmental Services, LLC to conduct multi-phase extraction as part of mitigation efforts as the referenced location.

IV. DESCRIPTION OF RECEIVING WATER

Discharge from Outfall No. 001 is to an unnamed wash that eventually drains to the Puerco River in Apache County, Arizona. The Navajo Nation Surface Water Quality Standards 2007 indicates the following designated uses for the water body: Domestic Water Supply, Secondary Human Contact, Fish Consumption, Aquatic & Wildlife Habitat, and Livestock Watering.

V. EFFLUENT CHARACTERISTICS

The effluent is treated groundwater using Mobile Dual-Phase Extraction (MDPE) to remove refined petroleum product from subsurface. Extracted water (removed via MDPE) will be treated with Granulated Activated Carbon (GAC) and discharge to the unnamed wash at designated Outfall 001. Extracted non-aqueous phase liquid (NAPL) or "free product" will be disposed of at an authorized facility. No NAPL will be present in the effluent discharged. The total volume of effluent discharged is about 133 gallons per day and the permittee is required to notify EPA if daily flow ever exceeds 500 gallons per day. No flow limit has been established in the permit.

VI. DETERMINATION OF NUMERICAL EFFLUENT LIMITATIONS

Section 301(a) of the CWA provides that the discharge of any pollutant to waters of the United States is unlawful except in accordance with a NPDES permit. Section 402 of the Act establishes the NPDES program. The program is designed to limit the discharge of pollutants into waters of the United States from point sources [40 CFR 122.1(b)(1)] through a combination of various requirements including technology-based and water quality-based effluent limitations.

Sections 402 and 301(b)(1)(C) of the CWA require that the permit contain effluent limitations to meet water quality standards. Specifically, the regulation under 40 CFR 122.44(d) states that an NPDES permit must contain:

"Water quality standards and State requirements: any requirements in addition to or more stringent than promulgated effluent limitations guidelines or standards under Sections 301, 304, 306, 307, 318 and 405 of CWA necessary to:

(1) Achieve water quality standards established under section 303 of the CWA, including State narrative criteria for water quality.

Section 40 CFR 122.44(d)(i) states the following:

"Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality."

The permit limitations in this permit are based on the following:

A. In accordance with 40 CFR 122.44(d), the need for discharge limitations for all pollutants that may impact applicable water quality criteria and water quality standards must be evaluated. As part of this evaluation, discharge limitations are based on applicable water quality standards. USEPA approved the 1999 Navajo Nation Surface Water Quality Standards ("NNSWQS"), on March 23, 2006. The NNSWQS were revised in 2007 and approved by U.S. EPA on March 26, 2009. The approved 1999 NNSWQS and the 2007 revisions will be used on a best professional judgment ("BPJ") basis for purposes of developing water quality based effluent limitations. The requirements contained in the permit are necessary to prevent violations of applicable water quality standards.

The permit requires the permittee to conduct monitoring for all pollutants or parameters where effluent limits have been established, at the minimum frequency specified. Additionally, where effluent concentrations of toxic parameters are unknown or where data is insufficient to determine reasonable potential, monitoring may be required for pollutants or parameters where effluent limits have not been established.

A. Water Quality Based Effluent Limitations ("WQBELs")

The permit contains discharge limitations, Oil and and pH. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge by prior to entry into the receiving water.

Water quality-based effluent limitations, or WQBELS, are required in NPDES permits when the permitting authority determines that a discharge causes, has the reasonable potential to cause, or contributes to an excursion above any water quality standard. (40 CFR 122.44(d)(1)).

When determining whether an effluent discharge causes, has the reasonable potential to cause, or contributes to an excursion above narrative or numeric criteria, the permitting authority shall use procedures which account for existing controls on point and non point sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity) and where appropriate, the dilution of the effluent in the receiving water [40 CFR 122.44 (d)(1)(ii)].

U.S. EPA evaluated the reasonable potential to discharge toxic pollutants according to guidance provided in the *Technical Support Document for Water Quality-Based Toxics Control* (TSD) (Office of Water Enforcement and Permits, U.S. EPA, March 1991) and the *U.S. EPA NPDES Permit Writers Manual* (Office of Water, U.S. EPA, December 1996). These factors include:

- 1. Applicable standards, designated uses and impairments of receiving water
- 2. Dilution in the receiving water
- 3. Type of industry
- 4. History of compliance problems and toxic impacts
- 5. Existing data on toxic pollutants Reasonable Potential analysis

1. <u>Applicable standards, designated uses and impairments of receiving water</u>

The 2007 NNSWQS established water quality criteria for the following beneficial uses (Upper and Lower Puerco within Navajo Nation boundary) are defined by the NNSWQS as: Domestic Water Supply, Secondary Human Contact, Fish Consumption, Aquatic & Wildlife Habitat, and Livestock Watering.

2. Dilution in the receiving water

Discharge from Outfall No. 001 is to an unnamed wash that is a tributary to the Puerco River which may have no natural flow during certain times of the year. Therefore, no dilution of the effluent has been considered in the development of water quality based effluent limits applicable to the discharge.

3. Type of industry

Typical pollutants of concern in remediation of groundwater contaminated with historical release of refined petroleum products include organics found in petroleum products, as well as potential lead found historically in such products as well as pH due to the treatment operations.

4. Existing data on pollutants

This is a new permit. However, the permittee indicated in its application that it expects to find the following pollutants in the effluent in the following concentrations:

Pollutant	Maximum Daily Value
Benzene	< 5 ug/L
Toluene	< 1000 ug/L
Ethylbenzene	< 700 ug/L
Xylene	< 1000 ug/L
Methyl-t-butyl ether	< 2.6 ug/L
TBA	< 12 ug/L
Naphthalene	< 6.2 ug/L
EDC	< 5 ug/L

B. Rationale for WQBELS

Pursuant to the narrative surface water quality standards (Section 202 of 2007 NNSWQS and Section 203 of *draft* 2016 revisions), the discharge shall be free from pollutants in amounts or combinations that cause solids, oil, grease, foam, scum, or any other form of objectionable floating debris on the surface of the water body; may cause a film or iridescent appearance on the surface of the water body; or that may cause a deposit on a shoreline, on a bank, or on aquatic vegetation.

1. Flow Rates

Under the permit, there are no flow limits but the flow must be monitored and reported. The monitoring frequency is daily when there is discharge.

2. Oil and Grease (O&G)

Based on BPJ the O&G maximum limitations is 5 mg/L and the monitoring frequency is twice per month.

3.. pH

The permit requires that effluent pH not fall below 6.5 or above 9.0 standard pH units, identical to those in the previous permit. They are based on NNSWQS. The monitoring frequency is daily when there is discharge.

VII. PERMIT REOPENER

At this time, there is no reasonable potential to establish any other water quality-based limits. Should any monitoring indicate that the discharge causes, has the reasonable potential to cause, or contributes to excursions above a water quality criterion, the permit may be reopened for the imposition of water quality-based limits and/or whole effluent toxicity limits. This permit may be modified, in accordance with the requirements set forth at 40 CFR 122.44 and 124.14, to include appropriate conditions or limits to address demonstrated effluent toxicity based on newly available information, or to implement any new U.S. EPA-approved water quality standards.

VIII. NARRATIVE WATER QUALITY-BASED EFFLUENT LIMITS

The 2007 Navajo Nation Water Quality Standards contains narrative water quality standards applicable to the receiving water. Therefore, the permit incorporates applicable narrative water quality standards.

IX. MONITORING AND REPORTING REQUIREMENTS

The permit requires the permittee to conduct monitoring for all pollutants or parameters where effluent limits have been established, at the minimum frequency specified. Additionally, where effluent concentrations of toxic parameters are unknown or where data are insufficient to determine reasonable potential, monitoring may be required for pollutants or parameters where effluent limits have not been established. The permit requires discharge data obtained during the previous three months to be summarized on monthly DMR forms and reported quarterly. If there is no discharge for the month, indicate "C" in the No Discharge box on the DMR form for that month. These reports are due January 28, April 28, July 28, and October 28 of each year. EPA has implemented electronic reporting of DMRs and therefore the Permittee shall submit all DMRs electronically as specified in the permit. A waiver from electronic reporting is available if the Permittee meets the requirements for, and follows the procedures to request such a waiver.

The permittee shall conduct effluent monitoring to evaluate compliance with the permit conditions. The permittee shall perform all monitoring, sampling and analyses in accordance with the methods described in the most recent edition of 40 CFR 136, unless otherwise specified in the permit. All monitoring data shall be reported on monthly DMRs and submitted quarterly as specified in the permit. All DMRs are to be submitted electronically to EPA using NetDMR.

X. OTHER CONSIDERATIONS UNDER FEDERAL LAW

A. Anti-Backsliding

Section 402(o) of the CWA prohibits the renewal or reissuance of an NPDES permit that contains effluent limits less stringent than those established in the previous permit, except as provided in the statute. This is a new permit so this provision does not apply.

B. Antidegradation Policy

EPA's antidegradation policy at 40 CFR 131.12 requires that existing water uses and the level of water quality necessary to protect the existing uses be maintained. As described in this document, the permit establishes effluent limits and monitoring requirements to ensure that all applicable water quality standards are met. The permit does not include a mixing zone, therefore these limits will apply at the end of pipe without consideration of dilution in the receiving water. The permit is not expected to adversely affect receiving water bodies or result in any degradation of water quality.

C. Impact to Threatened and Endangered Species

1. Background

Section 7 of the Endangered Species Act of 1973 (16 U.S.C. § 1536) requires federal agencies to ensure that any action authorized, funded, or carried out by the federal agency does not jeopardize the continued existence of a listed or candidate species, or result in the destruction or adverse modification of its habitat. Since the issuance of NPDES permits by U.S. EPA is a Federal action, consideration of a permitted discharge and its effect on any listed species is appropriate.

The NPDES permit authorizes the discharge of treated ground water historically contaminated by refined petroleum products into unnamed wash which eventually drains into the Puerco River, a water of the United States. Federally listed threatened and endangered species that may occur in the vicinity of the discharge location as provided in official Species List letters from the Arizona and New Mexico Ecological Services Filed Offices of the FWS are described below. The FWS has deferred all its survey and information collection in the Navajo Nation to the Navajo Nation NHP who may also provide additional species for consideration.

a. Birds

Mexican Spotted Owl (Strix occidentalis lucida)
Yellow-billed Cuckoo (Coccyzus americanus)
Southwestern Willow Flycatcher (Empidonax traillii extimus)

b. Reptiles

Northern Mexican Gartersnake (Thamnophis eques megalops)

c. Fishes

Zuni Bluehead Sucker (Catostomus discobolus yarrowi)

d. Plants

Zuni Fleabane (Erigeron rhizomatus)

There are no critical habitats within the project area

2. U.S. EPA's Finding

This permit authorizes the discharge of treated wastewater in conformance with the federal secondary treatment regulations and the NNSWQS. These standards are applied in the permit both as numeric and narrative limits. The standards are designed to protect aquatic species, including threatened and endangered species, and any discharge in compliance with these standards should not adversely impact any threatened and endangered species.

EPA believes effluent released in compliance with this permit will have no effect on any federally-listed threatened or endangered species. There are no critical habitats in the project area. Therefore, no requirements specific to the protection of endangered species or critical habitat are in the permit. U.S. EPA may decide that changes to the permit may be warranted based on receipt of new information. A re-opener clause has been included should new information become available to indicate that the requirements of the permit need to be changed.

EPA has forwarded a copy of the draft permit and this fact sheet to NNHP for review and comment on conclusions concerning the effects of the permit on listed species

D. Impact to National Historic Properties

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effect of their undertakings on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. Pursuant to activity authorized by this NPDES permit no new construction or disturbance of land is anticipated. Therefore, pursuant to the NHPA and 36 CFR §800.3(a)(1), EPA is making a determination that issuing this NPDES permit does not have the potential to affect any historic properties or cultural properties. As a result, Section 106 does not require EPA to undertake additional consulting on this permit issuance.

E. Consideration of Environmental Justice (EJ) Impact

EPA has conducted a screening level evaluation of the potential impact of this facility and other permitted facilities within the immediate area on local residents through use of EPA's EJSCREEN tool. Specifically, EPA used EJSCREEN to identify facilities near the Speedy's Truck Stop facility that could pose risk to local residents through discharge of environmental contaminants. EPA has also evaluated whether demographic characteristics of the population living in the vicinity of the facility indicate that the local population might be particularly susceptible to such environmental risks. The results show that, at the time of his analysis conducted on the area in which Speedy's Truck Stop is located was above the 90th percentile for Ozone on a national basis though below 90th percentile in the State and in EPA Region 9. The demographic characteristics of the community living near the facility indicates the local population may be at relatively higher risk if exposed to environmental contaminants than the national population. The demographic characteristics that showed potentially sensitive scores were a high proportion of minority and low income population.

EPA also considers the characteristics of the wastewater treatment facility operation and discharges, and whether those discharges, in combination with discharges from local hazard sources, pose exposure risks that the NPDES permit needs to further address. The Speedy's facility is unlikely to discharge any noticeable ozone contributing pollutants via discharges authorized by the NPDES permit. EPA thus finds no evidence to indicate the wastewater facility discharge poses a significant risk to local residents. EPA concludes that the facility is unlikely to contribute to any EJ issues. Furthermore, EPA believes that by implementing and requiring compliance with the provisions of the Clean Water Act, which are designed to ensure full protection of human health, the permit is sufficient ensure the facility discharge to not cause or contribute to human health risk in the vicinity of the facility.

F. Asset Management

40 CFR 122.41(e) requires permittees to properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. Asset management planning provides a framework for setting and operating quality assurance procedures and ensuring the permittee has

sufficient financial and technical resources to continually maintain a targeted level of service. As this permit is for discharge from a dedicated treatment facility this requirement is not applicable.

XI. STANDARD CONDITIONS

The permit requires the permittee to comply with EPA Region IX Standard Federal NPDES Permit Conditions, dated March 28, 2016.

XII. ADMINISTRATIVE INFORMATION

A. Public Notice (40 CFR 124.10)

The public notice is the vehicle for informing all interested parties and members of the general public of the contents of a draft NPDES permit or other significant action with respect to an NPDES permit or application.

B. Public Comment Period (40 CFR 124.10)

The proposed permit was public noticed on EPA's website, and/or in a daily or weekly newspaper within the area affected by the facility or activity, with a minimum of 30 days provided for interested parties to respond in writing to EPA.

C. Water Quality Certification Requirements (40 CFR 124.53 and 124.54)

For States, Territories, or Tribes with EPA approved water quality standards, EPA is requesting certification from the affected State, Territory, or Tribe that the proposed permit will meet all applicable water quality standards.

XIII. CONTACT INFORMATION

Requests for additional information relating to this permit may be directed to:

Gary Sheth EPA Region IX 75 Hawthorne Street (WTR 2-3) San Francisco, California 94105

Tel: (415) 972-3516 Email: seth.gary@epa

XIV. REFERENCES

NNEPA 2008. Navajo Nation Surface Water Quality Standards 2007.

EPA. 1991. *Technical Support Document for Water Quality-based Toxics Control*. Office of Water, EPA. EPA/505/2-90-001.

EPA. 2010. U.S. EPA NPDES Permit Writers' Manual. Office of Water, EPA. EPA-833-K-10-001.

Speedy's Convenience, Inc. 2017. Permit Application and supporting documents.